

REMARKS/ARGUMENTS

Reconsideration and withdrawal of the rejections of the application are respectfully requested in view of the amendments and remarks herewith, which place the application into condition for allowance. The present amendment is being made to facilitate prosecution of the application.

I. STATUS OF THE CLAIMS AND FORMAL MATTERS

Claims 1, 3 and 5-8 are currently pending. Claim 8 is hereby added. Claims 1 and 8 are independent. Claim 1 is hereby amended. No new matter has been introduced. Support for this amendment is provided throughout the Specification as originally filed.

Changes to the claims are not made for the purpose of patentability within the meaning of 35 U.S.C. §101, §102, §103, or §112. Rather, these changes are made simply for clarification and to round out the scope of protection to which Applicants are entitled.

II. REJECTIONS UNDER 35 U.S.C. §103

Claims 1-3 and 5-7 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,363,108 to Agrawal et al. (hereinafter "Agrawal") in view of U.S. Patent 5,920,591 to Fukasawa et al. (hereinafter "Fukasawa").

Applicants respectfully traverse this rejection in view of the amendments to claims made herein above.

Independent claim 1, as amended, recites, *inter alia*:

“wherein the replicas generated by the correlation coefficient generator change in sequence each time m chips are advanced, the replicas inputted to the matched filter are updated by a value whose phase advances by m chips each time a searchable range of m chips per certain first period advances”

Claim 1, as amended, recites “the replicas generated by the correlation coefficient generator change in sequence each time m chips are advanced, the replicas inputted to the matched filter are updated by a value whose phase advances by m chips each time a searchable range of m chips per certain first period advances.” This feature enables “said synchronicity detection apparatus detects a local maximum correlation value over a searchable range equal to said m shift registers; the searchable range being repeated plural times over the length of the spread code” as recited in claim 1. This distinguishing feature of the present invention is shown in Figure 10 and can be directly contrasted with the features of prior art systems shown in Figure 3.

Thus, the number of levels of a shift register equipped with matched filters in the detection device is m , and the searchable range per time (one unit) is m chips. The state of the shift registers in the matched filter is synchronized to a clock and proceeds one chip at a time. The m -bit correlation coefficient (in other words, the output of the correlation coefficient generator: the spread code replica code) inputted in the matched filter is updated by a value whose phase advances by m chips each time the searchable range of m chips per time (one unit) advances. Pub. App. par. [0063] and FIG. 10.

As shown in FIGS. 3 and 10 of the present application, both the present invention (and prior art systems) perform a number of correlations ($n \times m$) over an entire spread code cycle (T).

However, prior art systems correlate over a searchable range (of $n \times m$ chips) for the entire spread code cycle; whereas the present invention repeats (e.g. n times) over a reduced searchable range ($= m$ chips) in the spread code cycle. As a result, the present invention detects a local maximum value correlation over each reduced searchable range; rather than detecting a single maximum value for the entire spread code cycle as in the prior art. In this manner, the present invention accomplishes its objective of detecting a plurality of correlations within one spread code cycle.

Applicants respectfully assert that Agrawal and Fukasawa are both directed to systems analogous to the prior art system shown in Figure 3. Accordingly, Agrawal and Fukasawa fail to meet this limitation and the rejected claims should now be allowed.

For reasons similar or somewhat similar to those described above with regard to independent claim 1, independent claim 8 is also believed to be patentable.

III. DEPENDENT CLAIMS

The other claims are dependent from one of the claims discussed above and are therefore believed patentable for at least the same reasons. Because each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

CONCLUSION

Claims 1, 3 and 5-8 are in condition for allowance. In the event the Examiner disagrees with any of statements appearing above with respect to the disclosure in the cited reference, or


references, it is respectfully requested that the Examiner specifically indicate those portions of the reference, or references, providing the basis for a contrary view.

Please charge any additional fees that may be needed, and credit any overpayment, to our Deposit Account No. 50-0320.

In view of the foregoing amendments and remarks, it is believed that all of the claims in this application are patentable and Applicants respectfully request early passage to issue of the present application.

Respectfully submitted,

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